

RANBAR ELECTRICAL MATERIALS INC -- ISONEL 31 -- 6115-01-187-3692

===== Product Identification =====

Product ID:ISONEL 31
MSDS Date:07/26/1999
FSC:6115
NIIN:01-187-3692
Status Code:A
MSDS Number: CKMJS
=== Responsible Party ===
Company Name:RANBAR ELECTRICAL MATERIALS INC
Address:RT 993
City:MANOR
State:PA
ZIP:15665
Country:US
Info Phone Num:724-864-8200
Emergency Phone Num:724-864-8200
Chemtrec Ind/Phone:(800)424-9300
CAGE:1PP28

=== Contractor Identification ===

Company Name:ELMAGCO INC
Address:500 INDUSTRIAL RD
Box:City:SUGAR LAND
State:TX
ZIP:77478
Country:US
Phone:281-240-6111
Contract Num:SP0430 -99-M-CN70
CAGE:52142
Company Name:RANBAR ELECTRICAL MATERIALS INC
Address:RT 993
Box:607
City:MANOR
State:PA
ZIP:15665
Country:US
Phone:724-864-8200
CAGE:1PP28

===== Composition/Information on Ingredients =====

Ingred Name:XYLENE
CAS:1330-20-7
RTECS #:ZE2100000
Minumum % Wt:20.
Maxumum % Wt:30.
OSHA PEL:TWA 100 PPM
ACGIH TLV:434 MG/M3;100 PPM
ACGIH STEL:651 MG/M3;150 PPM
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:MINERAL SPIRITS
CAS:64742-88-7
Minumum % Wt:20.
Maxumum % Wt:30.
OSHA PEL:500 PPM TWA
ACGIH TLV:100 PPM TWA

===== Hazards Identification =====

LD50 LC50 Mixture:4300 MG/KG (RAT) XYLENES

Health Hazards Acute and Chronic:ACUTE: HAZARDOUS IN CASE OF SKIN CONTACT (IRRITANT), OF INHALATION. SLIGHTLY DANGEROUS TO DANGEROUS IN CASE OF EYE CONTACT (IRRITANT), OF INGESTION. CHRONIC: TARGET ORGANS DAMAGE. TARGET ORGANS:THE SUBSTANCE IS TOXIC TO BLOOD, KIDNEYS, THE NERVOUS SYSTEM, LIVER AND MUCOUS MEMBRANES.

Explanation of Carcinogenicity:NOT AVAILABLE

Effects of Overexposure:SKIN/EYE/INHALATION/INGESTION: IRRITATION.

TARGET ORGANS:SUBSTANCE IS TOXIC TO BLOOD, KIDNEYS, LUNGS, NERVOUS SYSTEM, LIVER AND MUCUS MEMBRANES.

Medical Cond Aggravated by Exposure: REPEATED OR PROLONGED EXPOSURE TO THE SUBSTANCE CAN PRODUCE TARGET ORGANS DAMAGE.

===== First Aid Measures =====

First Aid:EYE CONTACT: IMMEDIATELY FLUSH EYES WITH RUNNING WATER FOR AT LEAST 15 MINUTES, KEEPING EYELIDS OPEN. COLD WATER MAY BE USED. SKIN: AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF WATER. GENTLY AND THOROUGHLY WASH THE CONTAMINATED SKIN WITH RUNNING WATER AND NON-ABRASIVE SOAP. BE PARTICULARLY CAREFUL TO CLEAN FOLDS, CREVICES, CREASES AND GROIN. COVER THE IRRITATED SKIN WITH AN EMOLLIENT. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION. WASH CONTAMINATED CLOTHING BEFORE REUSING. INHALATION: ALLOW THE VICTIM TO REST IN A WELL VENTILATED AREA. SEEK IMMEDIATE MEDICAL ATTENTION.

===== Fire Fighting Measures =====

Flash Point Method:CC

Flash Point:=26.7C, 80.1F

Autoignition Temp:=464.C, 867.2F

Lower Limits:1%

Upper Limits:7%

Extinguishing Media:FLAMMABLE LIQUID, SOLUBLE OR DISPERSED IN WATER.

SMALL FIRE: USE DRY CHEMICALS, CO2, ALCOHOL FOAM OR WATER SPRAY.

LARGE FIRE: USE ALCOHOL FOAM, WATER SPRAY OR FOG.

Fire Fighting Procedures:HIGHLY FLAMMABLE IN PRESENCE OF REDUCING MATERIALS. SLIGHTLY FLAMMABLE TO FLAMMABLE IN PRESENCE OF OPEN FLAMES AND SPARKS OF HEAT. COOL CONTAINERS WITH WATER SPRAY.

FIREFIGHTERS SHOULD WEAR FULL PROTECTIVE EQUIPMENT.

Unusual Fire/Explosion Hazard:VAPOR MAY TRAVEL CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND FLASH BACK (XYLENES)

===== Accidental Release Measures =====

Spill Release Procedures:SMALL SPILL: ABSORB WITH AN INERT MATERIAL AND PUT THE SPILLED MATERIAL IN AN APPROPRIATE WASTE DISPOSAL. LARGE SPILL: FLAMMABLE LIQUID. ELIMINATE SOURCES OF IGNITION. STOP LEAK IF WITHOUT RISK. ABSORB WITH DRY EARTH, SAND OR OTHER NON-COMBUSTIBLE MATERIAL. DO NOT TOUCH SPILLED MATERIAL. PREVENT ENTRY INTO SEWERS, BASEMENTS OR CONFINED AREAS: DIKE IF NEEDED.

===== Handling and Storage =====

Handling and Storage Precautions:FLAMMABLE MATERIALS SHOULD BE STORED IN A SEPARATE SAFELY STORAGE CABINET OR ROOM. KEEP AWAY FROM HEAT AND SOURCES OF IGNITION. KEEP CONTAINER TIGHTLY CLOSED. KEEP IN A COOL WELL-VENTILATED PLACE. GROUND ALL EQUIPMENT CONTAINING MATERIAL. A REFRIGERATED ROOM WOULD BE PREFERABLE.

Other Precautions:KEEP AWAY FROM HEAT. KEEP AWAY FROM SOURCES OF IGNITION. GROUND ALL EQUIPMENT CONTAINING MATERIAL. DO NOT INGEST. DO NOT BREATHE GAS, FUMES, VAPOR OR SPRAY. AVOID CONTACT WITH SKIN. IN CASE OF INSUFFICIENT VENTILATION, WEAR SUITABLE RESPIRATORY EQUIPMENT.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:VAPOR RESPIRATOR.WHEN THE CONCENTRATION LEVEL IS ABOVE TLV/PEL, BE SURE TO USE A MSHA/NIOSH APPROVED RESPIRATOR OR EQUIVALENT. WEAR APPROPRIATE RESPIRATOR WHEN VENTILATION IS INADEQUATE.

Ventilation:PROVIDE EXHAUST VENTILATION OR OTHER ENGINEERING CONTROLS TO KEEP THE AIRBORNE CONCENTRATIONS OF VAPORS BELOW THEIR RESPECTIVE THRESHOLD LIMIT VALUE.

Protective Gloves:PVA OR NEOPRENE GLOVES

Eye Protection:SAFETY GLASSES, SPLASH GOGGLES.

Other Protective Equipment:ENSURE THAT EYEWASH STATION AND SAFETY SHOWER IS PROXIMAL TO THE WORK-STATION LOCATION. FULL SUIT, BOOTS.

Supplemental Safety and Health

LARGE SPILL: PROTECTIVE CLOTHING MIGHT NOT BE SUFFICIENT: CONSULT SPECIALIST BEFORE HANDLING THIS PRODUCT. THIS ITEM IS A PART 3 OF A THREE PART KIT. SEE MFN 1 AND 2 FOR OTHER PARTS, SAME NSN.

===== Physical/Chemical Properties =====

HCC:F3

Boiling Pt:=138.5C, 281.3F

Vapor Pres:6MM OF HG@20C

Vapor Density:5.3 (AIR=1

Spec Gravity:.92 (WATER=1)

Evaporation Rate & Reference:.07

Appearance and Odor:LIQUID AMBER, HYDROCARBON ODOR.

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

HIGHLY REACTIVE WITH OXIDIZING AGENTS. REACTIVE WITH REDUCING AGENTS, ORGANIC MATERIALS, METALS, ALKALIS. SLIGHTLY REACTIVE TO REACTIVE WITH ACIDS. NON-REACTIVE WITH MOISTURE.

Hazardous Decomposition Products:OXIDES OF CARBON.

===== Toxicological Information =====

Toxicological Information:LC50 (ESTIMATED VALUES)5091 PPM 4 HRS RAT (MINERAL SPIRIT). ACUTE ORAL TOXICITY (LD50, RAT)= 4300 MG/KG (XYLENE). ACUTE DERMAL TOXICITY (LD50, RAT) = 4000 MG/KG (MINERAL SPIRIT).

===== Ecological Information =====

Ecological:NO DATA AVAILABLE.

===== Disposal Considerations =====

Waste Disposal Methods:RECYCLE TO PROCESS, IF POSSIBLE. CONSULT YOUR LOCAL OR REGIONAL AUTHORITIES.

===== MSDS Transport Information =====

Transport Information:RESIN SOLUTION, 3, UN1865, III.

===== Regulatory Information =====

SARA Title III Information:SARA 313 TOXIC CHEMICAL NOTIFICATION AND RELEASE REPORTING: XYLENES.

Federal Regulatory Information:COMPONENTS ON THE TSCA INVENTORY: XYLENES AND MINERAL SPIRITS.

Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever,

expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.